



January 20, 1999

Dear Species Specialist:

You were contacted recently about a series of CALFED workshops regarding species and habitat conservation. Your attendance is requested for the species review workshop on January 27, 1999 in Sacramento. Your participation in this workshop will provide you the opportunity to give expert technical input into species and habitat conservation aspects of the CALFED Bay-Delta Program, a program of activities that encompasses much of California's great Central Valley. Your assistance will provide CALFED with valuable information with which to plan future actions to support species and habitat conservation and recovery.

The California Department of Fish and Game (DFG), U.S. Fish and Wildlife Service (USFWS), and National Marine Fisheries Service (NMFS) are working on the CALFED Conservation Strategy, which will establish goals for conservation of 205 target species and a number of vegetation types/natural communities. The goals for these species include achieving full or nearly full recovery, contributing to recovery, and sustaining existing populations without compromising future recovery efforts. The CALFED Conservation Strategy Team will be hosting three species review workshops. The workshop in which you will be participating focuses on riparian and upland communities and associated target species.

Our starting point is based on existing species recovery plans, the proposed CALFED Ecosystem Restoration Program, staff expertise, and existing internal information. We also recognize the need for input from a number of individuals who collectively represent a large body of knowledge and expertise with the species and communities we are addressing in the Conservation Strategy.

The enclosed materials are for your review before the workshop. These materials include:

- the meeting agenda,
- the CALFED Ecosystem Restoration Program focus area map,
- descriptions of natural community types covered by the Conservation Strategy,

Jones & Stokes Associates, Inc.

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- a list of species evaluated in the Conservation Strategy that are associated with riparian and upland communities for which recovery or contribution to recovery is a goal ("R" and "r" species),
- a list of species evaluated in the Conservation Strategy that are associated with riparian and upland communities for which sustaining existing populations is a goal ("m" species), and
- definitions of "R", "r", and "m" species goals.

We will distribute additional materials at the workshop with information on CALFED targets for habitat restoration and on habitats affected by CALFED actions. We will also have data generated from geographic information systems (GIS) for your use at the workshop.

At the workshop you will work with a team of other expert biologists/ecologists to review information on the effects of CALFED actions on habitats and to do the following:

- verify or modify CALFED's proposed goals for species,
- determine "prescriptions" for species (i.e., the conditions, such as acres of habitat or number of populations, that should be met to achieve species goals),
- determine if CALFED actions and conservation measures are sufficient to meet species goals,
- recommend changes or additions to conservation measures needed to achieve species goals, and
- identify data gaps and monitoring needs.

These tasks and this aspect of CALFED will be more fully explained at the workshop.

Jones & Stokes Associates is providing environmental consulting expertise to the CALFED Conservation Strategy and will hold the workshop at the JSA office. Workshop logistics are:

- **The workshop will be held on Wednesday, January 27, 1999, 9:00 a.m. to 4:30 p.m. at Jones & Stokes Associates, 2600 V Street, Sacramento, CA.**
- **Our building is the historic old brick schoolhouse between 26th Street and 27th Street, and V Street and W Street. (See enclosed map for directions.)**

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- **There is ample street parking in front of the building on V Street and on 26th and 27th Streets.**
- **Check in with the receptionist when you enter.**
- **Lunch will be provided.**

If you are unable to attend the workshop, your written comments would be greatly appreciated. We will have additional materials the day of the meeting and, if you wish to provide recommendations for species and natural communities within your area of expertise, we will send these materials to you. Please contact us before January 27, 1999.

If you have questions regarding the workshop, please contact either us or one of the following agency staff:

Mike Fris - USFWS - 916/979-2710

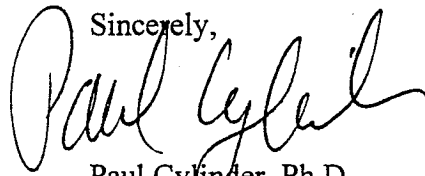
Jeff Single - DFG - 206/243-4041

Karl Halupka - NMFS - 707/575-6057

Marti Kie - CALFED - 916/657-2666

Your input into development of the CALFED Conservation Strategy is greatly appreciated. USFWS, NMFS, and DFG are deeply committed to the formulation of a strong conservation strategy that ensures benefits to a large number of species and natural communities. You can help in the achievement of that goal. We hope that you will take this opportunity to provide timely input into one of the largest ecosystem restoration programs undertaken.

Sincerely,



Paul Cylander, Ph.D.

Plant Ecologist



Pete Rawlings

Wildlife Biologist

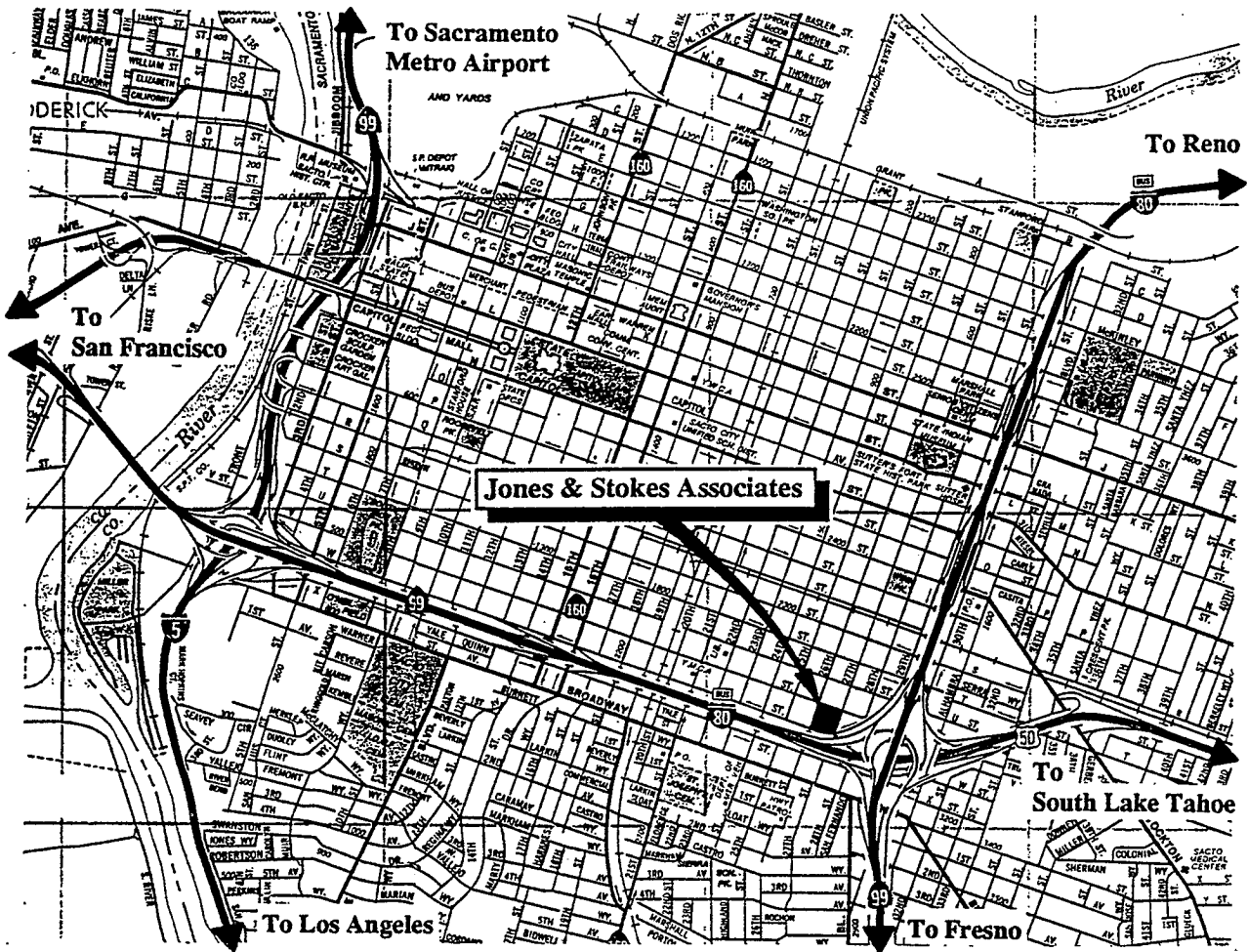
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Attachments

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From the Sacramento Airport, San Francisco, or Los Angeles

- ☐ Take Business 80 (Capital City Freeway) east and exit on 15th Street
- ☐ As you exit, keep left and follow "X" Street parallel to the freeway to 26th Street
- ☐ Turn left onto 26th Street, go underneath the freeway, proceeding to "V" Street
- ☐ Turn right onto "V" Street and park in front of the main entrance

From South Lake Tahoe

- ☐ Take U.S. 50 west and exit on 26th Street; merge right immediately
- ☐ Turn right onto 26th Street and proceed 1 block to "V" Street
- ☐ Turn right onto "V" Street and park in front of the main entrance



From Fresno

- ☐ Take State Route 99 north and exit on Broadway
- ☐ Turn left onto Broadway and proceed to 26th Street
- ☐ Turn right onto 26th Street, go underneath the freeway, proceeding to "V" Street
- ☐ Turn right onto "V" Street and park in front of the main entrance

From Reno

- ☐ Take Business 80 (Capital City Freeway) west and exit on "P" Street
- ☐ As you exit, keep left and follow 29th Street parallel to the freeway, then merge right
- ☐ Keep right and stay on 29th Street as it curves to the right
- ☐ Turn right onto 26th Street and proceed 1 block to "V" Street
- ☐ Turn right onto "V" Street and park in front of the main entrance

**Conservation Strategy Team
Species Expert Review
Workshop Agenda**

**Jones & Stokes Associates - Boardroom
January 27, 1999
9:00 am-4:30 pm**

1. Introduction - Mike Fris and Jeff Single (9:00-9:15)
2. Overview and Guidance - Pete Rawlings (9:15-10:00)
3. Overview and Implementation of CALFED Programs - Peter Kiel (10:00-10:15)
4. Review of Materials - All (10:15-11:15)
5. Group Discussion and Lunch - Mike Fris and Jeff Single (11:15-1:00)
6. Breakout Group Work Sessions - All (1:00-3:00)
7. Group Discussion - Breakout Group Leaders (3:00-4:00)
8. Wrap-Up - Mike Fris and Jeff Single (4:00-4:30)

NCCP Habitat Type Descriptions

NCCP Habitat Type	Habitat Description
Tidal perennial aquatic	Tidal perennial aquatic habitat is defined as deep water (greater than 3 meters in depth from mean low low tide) aquatic, shallow (less than or equal to 3 meters in depth from mean low low tide) aquatic, and unvegetated intertidal (i.e., tideflats) zones of estuarine bays, river channels, and sloughs.
Lacustrine	Lacustrine habitat is defined as permanent bodies of water that do not support emergent vegetation and are not subject to tidal exchange, including lakes, ponds, oxbows, gravel pits, and flooded islands.
Saline emergent	Saline emergent habitat is defined to include portions of San Francisco, San Pablo, and Suisun Bays and the Delta that support emergent wetland plant species that are tolerant of saline or brackish conditions within the intertidal zone or on lands that historically were subject to tidal exchange (i.e., diked wetlands).
Tidal freshwater emergent	Tidal freshwater emergent habitat is defined to include portions of the intertidal zones of the Delta that support emergent wetland plant species that are not tolerant of saline or brackish conditions.
Nontidal freshwater permanent emergent	Nontidal freshwater permanent emergent habitat is defined to include permanent (natural and managed) wetlands, including meadows, dominated by wetland plant species that are not tolerant of saline or brackish conditions.

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Natural seasonal wetland	Natural seasonal wetland habitat is defined to include vernal pools and other non-managed seasonal wetlands with natural hydrology that are dominated by herbaceous vegetation and annually pond surface water or maintain saturated soils at the ground surface for a portion of the year of sufficient duration to support facultative or obligate wetland plant species.
Managed seasonal wetland	Managed seasonal wetland habitat is defined to include wetlands dominated by native or non-native herbaceous plants, excluding croplands farmed for profit (e.g., corn and rice), that are flooded and drained by land managers during specific periods to enhance habitat values for specific wildlife species. Ditches and drains associated with managed seasonal wetlands are included in this habitat type.
Valley riverine aquatic	Valley riverine aquatic habitat is defined to include the water column of flowing streams and rivers in low-gradient channel reaches below approximately 300 feet in elevation that are not tidally influenced, including associated shaded riverine aquatic, pool, riffle, run, and unvegetated channel substrate (including seasonally exposed channel bed) habitat features, and sloughs, backwaters, overflow channels, and flood bypasses hydrologically connected to stream and river channels.

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Montane riverine aquatic	Montane riverine aquatic habitat is defined to include the water column of flowing streams and rivers above approximately 300 feet in elevation, including associated shaded riverine aquatic, pool, riffle, run, and unvegetated channel substrate (including seasonally exposed channel bed) habitat features, and sloughs, backwaters, and overflow channels hydrologically connected to stream and river channels.
Valley/foothill riparian	Valley/foothill riparian habitat is defined to include all successional stages of woody vegetation generally dominated by willow, Fremont cottonwood, valley oak, or sycamore within the active and historical floodplains of low-gradient reaches of streams and rivers generally below 300 feet in elevation.
Montane riparian	Montane riparian habitat is defined to include all successional stages of woody vegetation such as willow, black cottonwood, white alder, birch, and dogwood within the active floodplains of moderate to high gradient reaches of streams and rivers generally above 300 feet in elevation.
Grassland	Grassland habitat is defined to include upland vegetation communities dominated by introduced and native annual and perennial grasses, including unirrigated and irrigated pasture lands.
Inland dune scrub	Inland dune scrub habitat consists of vegetated stabilized sand dunes associated with river and estuarine systems.
Upland scrub	Upland scrub habitat is defined to include habitat areas that are dominated by shrubs characteristic of coastal scrub and chaparral communities.

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Valley/foothill woodland and forest	Valley/foothill woodland and forest habitat is defined to include non-riparian forest, woodland, and savanna below 300 feet in elevation. These vegetation communities are commonly dominated by valley oak, blue oak, interior live oak, coast live oak, and/or foothill pine.
Montane woodland and forest	Montane woodland and forest habitat is defined to include non-riparian forest and woodland above 300 feet in elevation. These vegetation communities are commonly dominated by pine, fir, cedar, and/or black oak.
Upland cropland	Upland cropland habitat is defined to include agricultural lands farmed for grain, field, truck, and other crops that are not seasonally flooded.
Seasonally flooded agriculture	Seasonally flooded agriculture habitat is defined to include agricultural lands farmed for grain, field, truck, rice, and other crops that require seasonal flooding for durations of a least 1 week as a management practice (e.g., pest control and irrigation) or are purposefully flooded seasonally to enhance habitat values for specific wildlife species (e.g., duck clubs). Agricultural ditches and drains associated with maintaining seasonally flooded agriculture are included in this habitat type.

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Evaluation Species Associated with Riparian and Upland and NCCP Habitats
with Proposed “R” and “r” Species Goals

Evaluation Species	Proposed Species Goal		NCCP Habitat Type ¹																	
			Upland and Riparian Habitats							Aquatic Habitats				Wetland and Agricultural Habitats						
	“R”	“r”	VFR	MR	G	IDS	US	VF W	MW F	TPA	VRA	MR A	L	SE	TFE	NFP E	NSW	MS W	UC	SFA
Least Bell’s vireo		X	X	X																
Valley elderberry longhorn beetle	X		X	X																
Riparian brush rabbit		X	X																	
Little willow flycatcher		X	X	X																
Bank swallow		X	X								X									
Western yellow-billed cuckoo		X	X																	
Greater sandhill crane		X			X											X	X	X	X	X
Swainson’s hawk		X	X		X		X	X									X	X	X	X
San Joaquin Valley woodrat		X	X																	
California yellow warbler		X	X	X																
Delta coyote-thistle		X	X																	
Northern California black walnut (native stands)		X	X																	

¹TPA = Tidal perennial aquatic
VRA = Valley riverine aquatic
MRA = Montane riverine aquatic
L = Lacustrine
SE = Saline emergent

TFE = Tidal freshwater emergent
NFPE = Nontidal freshwater permanent emergent
NSW = Natural seasonal wetlands
MSW = Managed seasonal wetlands
VFR = Valley/foothill riparian

MR = Montane riparian
G = Grassland
IDS = Inland dune scrub
US = Upland scrub
VFW = Valley/foothill woodland and forest

MWF = Montane woodland and forest
UC = Upland cropland
SFA = Seasonally flooded agriculture

Evaluation Species Associated with Riparian and Upland NCCP Habitats
with Proposed "m" Species Goals

Evaluation Species	NCCP Habitat Types ¹																	
	Riparian and Upland Habitats							Aquatic Habitats				Wetland and Agricultural Habitats						
	VF R	M R	G	ID S	US	VF W	M W F	TP A	VR A	M RA	L	SE	TF E	NF PE	NS W	M S W	U C	SF A
Mammals																		
San Joaquin kit fox			X														X	
Giant kangaroo rat			X															
Ringtail	X	X			X	X	X											
Nelson's antelope ground squirrel			X															
Riparian brush rabbit	X																	
San Joaquin Valley woodrat	X																	
Greater western mastiff-bat	X	X	X		X	X	X											
Birds																		
Least Bell's vireo	X	X																
Northern spotted owl							X											
Bald eagle	X	X					X	X	X	X	X					X		
California condor			X		X	X												
Little willow flycatcher	X	X																

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	VF R	M R	G	ID S	US	VF W	M W F	TP A	VR A	M RA	L	SE	TF E	NF PE	NS W	M S W	U C	SF A
Bank swallow	X								X									
Western yellow-billed cuckoo	X																	
Greater sandhill crane			X											X	X	X	X	X
White-tailed kite	X		X									X	X	X	X	X	X	X
Golden eagle	X		X		X	X												
Swainson's hawk	X		X		X	X									X	X	X	X
Mountain plover			X														X	
California yellow warbler	X	X																
Grasshopper sparrow			X														X	
Tricolored blackbird			X											X	X	X	X	X
Yellow-breasted chat	X	X																
Long-eared owl	X	X				X												
Short-eared owl			X									X	X	X	X	X		X
Western burrowing owl			X		X												X	

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 IDS = Inland dune scrub
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 UC = Upland cropland
 SFA = Seasonally flooded agriculture

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**Evaluation Species Associated with Riparian and Upland NCCP Habitats
with Proposed "m" Species Goals**

Evaluation Species	NCCP Habitat Types ¹																	
	Riparian and Upland Habitats							Aquatic Habitats				Wetland and Agricultural Habitats						
	VF R	M R	G	ID S	US	VF W	M W F	TP A	VR A	M RA	L	SE	TF E	NF PE	NS W	M S W	U C	SF A
Long-billed curlew			X					X				X		X	X	X	X	X
Cooper’s hawk	X	X				X	X											
Northern harrier			X									X	X	X	X	X	X	X
Osprey	X	X				X	X	X	X	X	X							
Double-crested cormorant (rookery)	X	X																
Black-crowned night heron (rookery)	X	X												X				
Great blue heron (rookery)	X	X																
Great egret (rookery)	X	X																
Snowy egret (rookery)	X	X												X				
Reptiles																		
Alameda whipsnake	X		X		X	X												
Blunt-nosed leopard lizard			X															
San Joaquin whipsnake			X		X	X												
Western pond turtle	X								X	X	X			X				
Amphibians																		

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**Evaluation Species Associated with Riparian and Upland NCCP Habitats
with Proposed "m" Species Goals**

Evaluation Species	NCCP Habitat Types ¹																	
	Riparian and Upland Habitats							Aquatic Habitats				Wetland and Agricultural Habitats						
	VF R	M R	G	ID S	US	VF W	M W F	TP A	VR A	M RA	L	SE	TF E	NF PE	NS W	M S W	U C	SF A
California red-legged frog	X	X	X						X	X	X			X	X	X		
Limestone salamander					X	X												
California tiger salamander			X								X				X			
Foothill yellow-legged frog	X	X							X	X								
Invertebrates																		
Callippe silverspot			X															
Lange’s metalmark				X														
Valley elderberry longhorn beetle	X	X																
Monarch butterfly (roost)						X												
Plants																		
Antioch Dunes evening-primrose				X														
Calistoga popcornflower			X											X	X			
Clara Hunt’s milkvetch			X			X												
Contra Costa wallflower				X														

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	Riparian and Upland Habitats							Aquatic Habitats				Wetland and Agricultural Habitats						
	VF R	M R	G	ID S	US	VF W	M W F	TP A	VR A	M RA	L	SE	TF E	NF PE	NS W	M S W	U C	SF A
El Dorado bedstraw					X	X												
Hartweg’s golden sunburst			X			X												
Large-flowered fiddleneck			X			X												
Layne’s ragwort					X	X												
Marin western flax			X		X													
Pallid manzanita					X													
Pine Hill ceanothus					X	X												
Pine Hill flannelbush					X	X												
San Benito evening-primrose					X	X												
San Joaquin adobe sunburst			X															
San Joaquin woollythreads			X												X			
Showy Indian clover			X												X			
Sonoma alopecurus	X													X				
Sonoma spineflower			X															

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Stebbins' morning-glory					X	X												
Tiburon Indian paintbrush			X															
Tiburon jewelflower			X															
Tiburon Mariposa lily			X															
White-rayed pentachaeta			X															
Baker's larkspur					X													
Baker's manzanita					X													
California vervain	X					X												
Delta coyote-thistle	X																	
Indian Valley brodiaea			X		X		X											
Ione buckwheat					X													
Irish Hill buckwheat					X													
Marin checkerbloom			X		X													
Mason's ceanothus					X													
Mt. Diablo bird's-beak					X													

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**Evaluation Species Associated with Riparian and Upland NCCP Habitats
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	Riparian and Upland Habitats							Aquatic Habitats				Wetland and Agricultural Habitats						
	VF R	M R	G	ID S	US	VF W	M W F	TP A	VR A	M RA	L	SE	TF E	NF PE	NS W	M S W	U C	SF A
North Coast semaphore grass							X							X	X			
Rock sanicle			X		X		X											
Santa Cruz tarplant			X															
Yellow larkspur			X		X													
Ione manzanita						X												
Rawhide Hill onion						X												
Alkali milkvetch			X												X			
Arburua Ranch jewelflower			X		X													
Ben Lomond buckwheat					X	X												
Big tarplant			X															
Brittlescale			X												X			
California beaked-rush							X							X				
Congdon’s lomatium					X	X												
Congdon’s tarplant			X															
Contra Costa manzanita					X													
Diablo helianthella			X															

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Diamond-petaled California poppy			X															
Ferris' milkvetch			X												X			
Heartscale			X		X													
Heckard's peppergrass			X															
Hospital Canyon larkspur					X	X												
Lesser saltscale			X												X			
Lost Hills crownscale			X												X			
Mad-dog skullcap							X							X	X			
Mariposa clarkia	X					X												
Marsh checkerbloom	X													X				
Merced phacelia			X															
Mt. Diablo jewelflower			X		X													
Mt. Diablo manzanita					X													
Mt. Hamilton coreopsis						X												
Mt. Hamilton jewelflower					X	X												
Napa western flax					X													

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MRA = Montane riverine aquatic
L = Lacustrine
SE = Saline emergent

TFE = Tidal freshwater emergent
NFPE = Nontidal freshwater permanent emergent
NSW = Natural seasonal wetlands
MSW = Managed seasonal wetlands
VFR = Valley/foothill riparian

MR = Montane riparian
G = Grassland
IDS = Inland dune scrub
US = Upland scrub
VFW = Valley/foothill woodland and forest

MWF = Montane woodland and forest
UC = Upland cropland
SFA = Seasonally flooded agriculture

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**Evaluation Species Associated with Riparian and Upland NCCP Habitats
with Proposed "m" Species Goals**

Evaluation Species	NCCP Habitat Types ¹																	
	Riparian and Upland Habitats							Aquatic Habitats				Wetland and Agricultural Habitats						
	VF R	M R	G	ID S	US	VF W	M W F	TP A	VR A	M RA	L	SE	TF E	NF PE	NS W	M S W	U C	SF A
Northern California black walnut (native stands)	X																	
Panoche peppergrass			X															
Red Hills ragwort						X												
Red-flowered lotus			X			X												
San Joaquin spearscale			X													X		
Saw-toothed lewisia		X					X											
Shaggyhair lupine					X	X												
Sharsmith's harebell					X													
Showy madia			X			X												
Slough thistle	X												X	X	X			
Spiny-sepaled button-celery			X												X			
Henderson's bent grass			X												X			
San Antonio Hills monardella					X	X												

¹TPA = Tidal perennial aquatic
VRA = Valley riverine aquatic
MRA = Montane riverine aquatic
L = Lacustrine
SE = Saline emergent

TFE = Tidal freshwater emergent
NFPE = Nontidal freshwater permanent emergent
NSW = Natural seasonal wetlands
MSW = Managed seasonal wetlands
VFR = Valley/foothill riparian

MR = Montane riparian
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IDS = Inland dune scrub
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Definitions of "R", "r", and "m" Goals

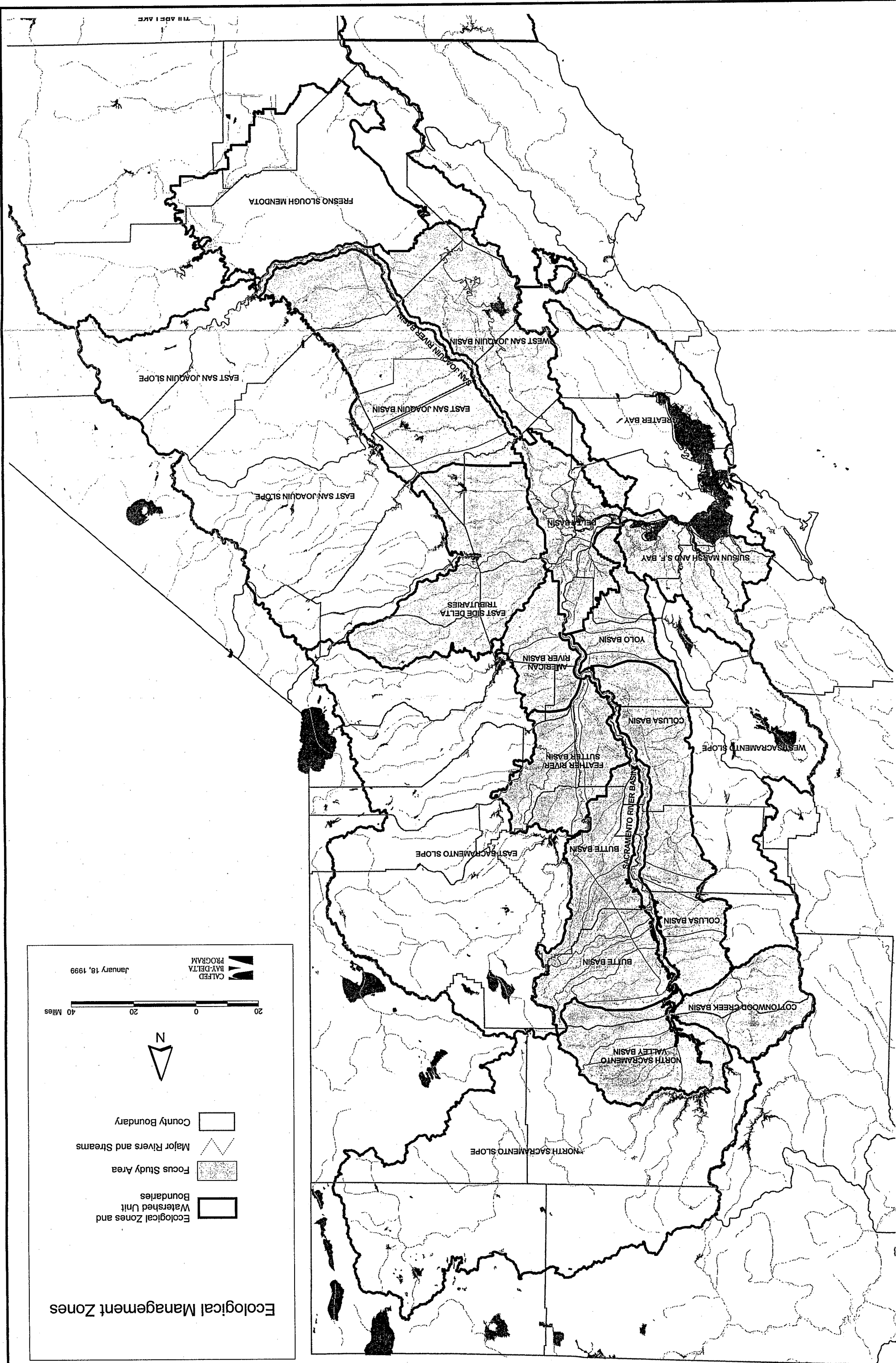
Recovery ("R"): For those species designated "R," the CALFED Program has established a goal to recover the species within the CALFED ERP Ecological Zones. A goal of "Recovery" was generally assigned to those species whose range is entirely or nearly entirely within the area affected by the CALFED Program and for which CALFED could reasonably be expected to undertake all or most of the actions necessary to recover the species. The term recover generally means the decline of a species is arrested or reversed, threats to the species are neutralized, and thus, the species' long-term survival in nature is assured. In the case of most species listed under the Federal ESA, recovery is equivalent, *at a minimum*, to the requirements of delisting. For certain species, such as anadromous fish, with threats outside the geographic scope or purview of the CALFED Program, CALFED may not be capable of completely recovering the species, but will implement all necessary recovery actions within the ERP Ecological Zones. For other species, CALFED may choose a goal that aims to achieve more than would be required for delisting (e.g., restoration of a species and/or its habitat to a level beyond delisting requirements). The effort required to achieve the goal of "Recovery" may be highly variable between species. In sum, a goal of "Recovery" implies that CALFED will undertake all actions within the ERP Ecological Zones and program scope necessary to recover the species.

Contribute to Recovery ("r"): For those species designated "r," the CALFED Program will make specific contributions toward the recovery of the species. The goal "Contribute to Recovery" was generally assigned to those species for which CALFED Program actions affect only a limited portion of the species range and/or CALFED Program actions have limited effects on the species. In the case of a species with a recovery plan, this may mean implementing some of the measures identified in the plan. For species without a recovery plan, this would mean implementing specific measures that would benefit the species. In sum, a goal of contributing to a species' recovery implies that CALFED will undertake *some* of the actions within its geographic and program scope necessary to recover the species.

Maintain ("m"): For those species designated "m," the CALFED Program will undertake actions to maintain the species (this category is less rigorous than Contribute to Recovery). The goal "Maintain" was generally assigned to species expected to be minimally affected by CALFED actions. For this category, CALFED will ensure that any adverse effects to the species are addressed commensurate with the level of effect on the species; thus, actions may not actually contribute to the recovery of the species, but would be expected, *at a minimum*, to not contribute to the need to list an unlisted species or degrade the status of an already listed species. CALFED will also maximize beneficial effects on these species to the extent practicable.

**CALFED Conservation Measures for Species with
Different Goals in Different Locations**

CALFED Scope	Species Goal		
	“R”	“r”	“m”
Problem Area (Delta and Suisun Marsh)	Implement all recovery plan measures.	Implement all recovery plan measures.	Avoid, minimize, compensate, and conserve as appropriate and commensurate with Program effects.
Solution Area (14 Ecological Management Zones)	Implement all recovery plan measures.	Implement some recovery plan measures.	Avoid, minimize, compensate, and conserve as appropriate and commensurate with Program effects.



Ecological Management Zones